

# **3D ARMORED CAVALRY REGIMENT AS AN OPERATIONALLY SIGNIFICANT FORCE**

**A MONOGRAPH  
BY  
Major Michael J. Harris  
Armor**



**School of Advanced Military Studies  
United States Army Command and General Staff  
College  
Fort Leavenworth, Kansas**

**Second Term AY 98-99**

Approved for Public Release Distribution is Unlimited

DTIC QUALITY INSPECTED 4

19991109 031

# REPORT DOCUMENTATION PAGE

Form Approved  
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

1. AGENCY USE ONLY (Leave blank)

2. REPORT DATE  
27 May 1999

3. REPORT TYPE AND DATES COVERED

4. TITLE AND SUBTITLE

3<sup>D</sup> ARMORED CAVALRY REGIMENT AS  
AN OPERATIONALLY SIGNIFICANT FORCE

5. FUNDING NUMBERS

6. AUTHOR(S)

MAJOR MICHAEL J HARRIS

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

Command and General Staff College  
School of Advanced Military Studies  
Fort Leavenworth, Kansas 66027

8. PERFORMING ORGANIZATION  
REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)

Command and General Staff College  
School of Advanced Military Studies  
Fort Leavenworth, Kansas 66027

10. SPONSORING / MONITORING  
AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION / AVAILABILITY STATEMENT

APPROVED FOR PUBLIC RELEASE:  
DISTRIBUTION UNLIMITED.

12b. DISTRIBUTION CODE

13. ABSTRACT (Maximum 200 words)

14. SUBJECT TERMS

ARMORED CAVALRY, OPERATIONALLY SIGNIFICANT

15. NUMBER OF PAGES

62

16. PRICE CODE

17. SECURITY CLASSIFICATION  
OF REPORT  
UNCLASSIFIED

18. SECURITY CLASSIFICATION OF THIS  
PAGE  
UNCLASSIFIED

19. SECURITY CLASSIFICATION  
OF ABSTRACT  
UNCLASSIFIED

20. LIMITATION OF ABSTRACT  
UNLIMITED

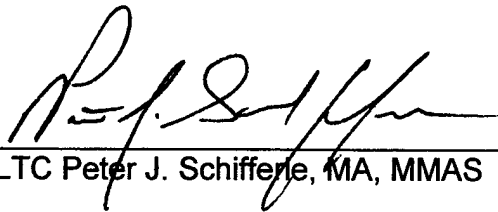
SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL


Major Michael J. Harris

Title of Monograph: *3d Armored Cavalry Regiment as an Operationally Significant  
Force*


Approved by:

  
\_\_\_\_\_  
LTC Peter J. Schifferle, MA, MMAS

Monograph Director

  
\_\_\_\_\_  
LTC Robin P. Swan, MMAS

Director, School of Advanced  
Military Studies

  
\_\_\_\_\_  
Philip J. Brookes, Ph.D.

Director, Graduate Degree  
Program

Accepted this 27th Day of May 1999

## ABSTRACT

**3d Armored Cavalry Regiment as an Operationally Significant Force  
by Major Michael J. Harris, USA, 57 pages.**

As of Spring 1999, the United States Army continues discussing the design of the Army After Next and the need to create an operationally significant force capable of deploying rapidly, conducting distributed operations using maneuver and firepower, facilitated by information dominance, to destroy enemy forces and to seize and retain ground. Although the creation of a Strike Force organization is being considered, an operationally significant force must be identified in the interim (year 2000–2010).

This monograph examines the question: Does the 3d Armored Cavalry Regiment (ACR) possess the characteristics required to be an operationally significant force? To answer this question this monograph applies three evaluation criteria. First, does the ACR possess the capability to conduct the variety of military actions necessary to accomplish the operational purpose of the military operation? Second, is the ACR capable of deploying quickly enough to a designated theater of operation to create conditions that support the military objective? Lastly, can the ACR logistically support itself for a designated period of time once it arrives in theater? In order evaluate the ACR's characteristics utilizing these three criteria, a near-term scenario based upon the current (1999) situation in Macedonia is created.

This monograph concludes that the 3d ACR does not meet the criteria required of an operationally significant force within the context of the given scenario. Although the ACR is capable of deploying to the Macedonia Theater of Operation (MTO) in forty-one days and a logistical support structure capable of sustaining the ACR can be organized, the 3d ACR does not possess the combat and combat support capability necessary to conduct the operational-level mission. Though the ACR contributes a significant portion of the combat capabilities required to achieve the operational purpose of the military operation, its combat support and combat service support needs will definitely require substantial augmentation.

## **TABLE OF CONTENTS**

|  | Page |
|--|------|
| 1. INTRODUCTION.....                         | 1    |
| 2. FUTURE ENVIRONMENT .....                  | 4    |
| Current Patterns of Conflict .....           | 4    |
| Scenario .....                               | 9    |
| The Mission .....                            | 11   |
| 3. MILITARY ACTIONS.....                     | 13   |
| Peace Operations .....                       | 15   |
| 4. TRANSPORTING THE 3d ACR.....              | 20   |
| 5. SUPPORTING AND SUSTAINING THE 3d ACR..... | 29   |
| Corps Support Group .....                    | 36   |
| 6. CONCLUSION .....                          | 39   |
| END NOTES .....                              | 42   |
| BIBLIOGRAPHY .....                           | 52   |

To my wingman Angela Marie,  
and my two dismounts Robert Michael Angelo, and Eufrasia Marie Nichole.

## CHAPTER 1

### INTRODUCTION

We must prepare for an uncertain future even as we address today's security problems. This requires that we keep our forces ready for shaping and responding requirements in the near term, while at the same time evolving our unparalleled capability to ensure we can effectively shape and respond to the future.

*President William Jefferson Clinton, A National Security Strategy for a New Century, 1998.<sup>1</sup>*

Since the collapse of the Soviet Union in 1991, America's military forces are more involved in military operations around the globe than they were during the Cold War. Combat operations in Iraq, support operations in response to natural disasters occurring within the United States and abroad, and stability operations in Panama, Bosnia, Somalia, Haiti and Kosovo, are but a few recent examples.<sup>2</sup>

This increase in worldwide involvement stems from U.S. national security policy and U.S. national military policy. The current U.S. national security strategy is based upon three elements: shaping the international environment, responding to the full spectrum of crises, and preparing for an uncertain future. The current national military policy identifies the objectives of promoting peace and stability while simultaneously preparing to defeat adversaries. Both policies facilitate increased U.S. military commitment worldwide.<sup>3</sup>

However, while the number of military commitments has increased, the size of the active duty force has substantially decreased. If the U.S. were to become involved in another operation similar to Desert Storm, the U.S. military would be hard pressed to assemble a force equivalent to the one it assembled

for the Gulf War. Due to military force reductions, that force, which consisted of two Marine divisions, seven active Army divisions, and combat brigades of two additional divisions, is no longer readily available. As of 1999, a force commitment equivalent to Desert Storm would require all ten of the Army's divisions.<sup>4</sup>

If the United States intends to continue with globally projecting its military forces to enforce U.S. policies, then it must be prepared to do so by organizing forces that are smaller yet remain operationally significant enough to accomplish their assigned mission. To be considered operationally significant, a force must possess the following three characteristics. First, the force must be capable of deploying *relatively* quickly into a designated area of operation (AO). Second, once deployed, the force must be logistically sustainable for a designated period of time. Lastly, the force must possess the means to conduct a variety of predetermined military actions (i.e., offense, defense, support and stability).<sup>5</sup>

Determining whether or not a force is operationally significant using these three characteristics will be entirely based on the context of the particular situation or mission. Specifying that a force must be capable of deploying relatively quickly is predicated upon how fast that force must be inserted onto an environment in order to create conditions that support the military's objectives. This requirement can vary considerably from one military operation to another. For example, in order to achieve some degree of surprise, the JTF commander responsible for Operation Urgent Fury (Panama 1989) specified that the initial forces involved in the operation had to be deployable within forty-eight hours after notification. Anything beyond forty-eight hours might jeopardize the success of the mission.<sup>6</sup>



In this particular situation, a relatively quick deployment was defined as forty-eight hours to deploy a primarily light force from the United States to Panama. On the other hand, an entirely different scenario such as deploying a heavy corps-size force to Saudi Arabia would create a totally new definition of a relatively quick deployment. Realistically, based upon the developing conditions, relatively quick could be established as seventy-five days after notification. Therefore, determining whether a force is operationally significant is based on the context of a particular situation or mission. This monograph will determine if the 3d Armored Cavalry Regiment possesses the characteristics required of an operationally significant force based upon a predetermined scenario in the country of Macedonia.

To determine if the ACR is an operationally significant force, this monograph will first identify a near-term, future scenario (1999-2010) that could involve the United States in general and the U.S. Army in particular. Based upon this scenario, this monograph will answer the following questions. First, what is the transportation requirement and time necessary to move the ACR from CONUS to the Macedonia Theater of Operation? Second, what is the logistic requirement necessary to sustain the ACR while it is deployed? Lastly, does the ACR possess the capability to conduct the military actions necessary to accomplish the assigned mission? Utilizing these criteria, this monograph assesses whether or not the ACR can be an operationally significant force in the Macedonia Theater of Operation (MTO).

## CHAPTER 2

### FUTURE ENVIRONMENT

Characteristics of an operationally significant force are heavily influenced by the environment into which the force is deploying and by the tasks that the force is expected to conduct while operating in that environment. The attributes required of a heavy force conducting offensive or defensive operations in a Southwest Asia environment (Operation Desert Storm) will vary considerably from those attributes required of a light force conducting support or stability operations in a Caribbean island environment (Operation Urgent Fury). Therefore, to determine whether a force is operationally significant, it is necessary to posit a realistic scenario based upon current patterns of conflict that could require U.S. military intervention.

#### *Current Patterns of Conflict*

Over the next ten to twelve years (1999-2010) U.S. military forces can anticipate becoming more involved in stability operations. Situations similar to Bosnia, Kosovo, and Macedonia will continue to surface and will likely require intervention and long term commitment by U.S. forces. This projected increase in stability operations is due to the increase in intrastate disputes that have surfaced on the world scene within the last decade. Many of these disputes are attributable to ethnic, nationalist, and separatist tensions that have already erupted in violence or have the potential to do so.<sup>7</sup>

Although intrastate disputes have been occurring since the days of the Roman Empire, recent events over the past decade have permitted these disputes to occur in greater numbers. The collapse of the Soviet Union and the end of its military and political influence over many third-world countries, the unprecedented population growth occurring in most under-developed countries, and the desire of various ethnic and nationalist groups to demand independence are three reasons contributing to the increase in intrastate disputes. Combining the increased number of disputes with worldwide media coverage has brought these disputes to the attention of the American public and has thus increased the chances of American military intervention.<sup>8</sup>

The collapse of the Soviet Union ended the bipolar world order that had existed since the end of WWII. Many states that had previously been a part of the Soviet Union sought independence. These states no longer felt compelled to remain aligned with the Soviet Union's ideology. However, other states that had previously been a part of the Soviet Union were able to exist primarily on support provided by the Soviet Union. Consequently, these states were unable to exist independently from the Soviet Union. When the Soviet Union collapsed, so did the aid these states desperately needed. Nations that had been held together largely by Soviet military and political influence, such as the former Yugoslavia, the USSR, and Czechoslovakia, fractured into separate entities. Still other nations, such as Somalia, fell into a state of anarchy. The evaporation of Soviet influence thus resulted in an increase in the number of failed nations around the globe and thereby led to an increase in intrastate conflicts.<sup>9</sup>

Unprecedented population growth and the trend towards urbanization occurring in under-developed countries are two other interrelated factors

contributing to intrastate disputes. Population growth in third world and developing countries has reached an all-time high. By the year 2005, seventy-two percent of the world's population will exist in developing countries. It is estimated that the majority of these people will have migrated to urban areas in search of employment, food, medical care, housing, and protection. This large influx of people will inflict tremendous strains upon the already over-burdened urban system that, in many instances, is even now unable to adequately provide for its inhabitants. Already within many of these mega-urban areas the inhabitants realize that the government is unable to furnish the military or civilian police force necessary to control the increasing levels of criminal activity. As a result, local warlords and gang activity exist, and corruption amongst government officials is high. These conditions, already in existence in many developing nations, are identical to those conditions observed in Somalia prior to United Nations (UN) intervention.<sup>10</sup>

The existence of dense concentrations of relatively young people in crowded and ramshackle urban shantytowns increases the likelihood of social explosion that could bring governments down, cause social chaos, and ultimately result in more failed states for the international community to deal with. In addition, this increasing urbanization signifies that the critical nodes in future intrastate wars will be urban rather than rural. Finally, there is the issue of refugee flows resulting from population pressures, environment degradation, political unrest, and increasing urbanization. Population growth and urbanization are therefore two factors that will significantly increase intrastate disputes.<sup>11</sup>

The changing concept of sovereignty amongst the international community will inevitably affect the nature of intrastate conflict. The international community

tends to define sovereignty along a continuum that runs between state and national sovereignty. Currently, the concept of national sovereignty is paramount, which means that the international community will look favorably on demands for intervention into intrastate conflicts for reasons of national self-determination or humanitarian need, even when these demands come at the expense of an existing nation-state.<sup>12</sup>

Events in the Balkans and northwestern Africa are just two such examples of ethnic or nationalist groups attempting to gain sovereignty. In each of these cases, countries were created not based upon the ethnic and national groups that inhabit the region, but rather on geographical boundaries irrationally drawn on a map. The boundaries in northwestern Africa were drawn during colonial occupation of Africa. Balkan boundaries were drawn and redrawn over the centuries based upon the outcome of battles as far back as the fourteenth century when the Ottoman Turks defeated the Serbians in battle. In each instance, national boundaries were created without the consideration or consensus of the people who inhabited the territory. Therefore, it can be anticipated that intrastate conflict will continue to arise in countries characterized by significant ethnic, nationalist, and separatist tensions, especially when the world community looks favorably on demands for intervention into intrastate conflicts for reasons of national self-determination or humanitarian need.<sup>13</sup>

The increase of intrastate disputes may often lead to the involvement of U.S. military forces to perform stability operations. This increased involvement worldwide stems from U.S. national security policy and U.S. national military policy. However, current and future intrastate disputes will not always directly threaten America's security interests. Although, such disputes may cause

problems for bordering nations that could endanger UN or North Atlantic Treaty Organization (NATO) security interests. Threats to these organizations can be in the form of unwanted refugee movements into bordering nations such as Turkey is experiencing with the Kurds, or as Albania and Macedonia will experience if the Serbs apply military force to expel the ethnic Albanians from Kosovo.<sup>14</sup>

Intrastate disputes will likely involve both the military forces of that nation and of its bordering nations. Therefore, intervening forces must be capable of transitioning quickly from non-combative to combat operations and vice versa as was witnessed during operations in Bosnia, Haiti and Panama. Kosovo may yet prove that only a force that is willing to use overwhelming combat power can force the aggressive factions to accept a peaceful resolution.

The increase in intrastate conflict will increase international pressure for UN, NATO and U.S. interventions. This fact alone justifies the importance for the U.S. military of devoting attention to determining what characteristics and capabilities an operationally significant force must possess to successfully conduct stability operations. Regardless of where the intrastate conflict arises, the U.S. military must possess an operationally significant force that can quickly respond to the theater of operation, conduct stability operations, and, when necessary, also possess the means to transition to combat operations. Even in stability operations, the ability to project sufficient combat power is generally respected by those with little or no combat power.

## Macedonia and surrounding countries

### *Scenario*

The current situation (1999) involving Macedonia and the atrocities being inflicted upon the ethnic Albanians in Kosovo by Serbian forces will be the selected scenario. This scenario is noteworthy in that it is related to current U.S. commitments in the area and in that it looks at the issue of a U.S. response if the current policy of deterrence fails. More importantly, this scenario has a moderate to high possibility of escalating within the near future.<sup>15</sup>

The hypothetical scenario assumes that Serbian actions in Kosovo have lead to open fighting between ethnic Albanians and Serbian forces. This fighting leads to a border war between Albanian and Serbian units. The fighting also

spreads to northwestern Macedonia, where thousands of ethnic Albanian refugees from Kosovo seek shelter. Because the Serbs succeed in cutting off the supply routes into Kosovo from Albania, northwestern Macedonia becomes the only available ground route through which aid can reach Kosovo. In an attempt to cut-off this aid, Serbian armed units freely ignore the Serbian (Kosovo)-Macedonia border. Serbian paramilitaries carry out punitive raids on ethnic Albanian villages and refugee camps on the Macedonian side of the border, while regular Serbian army units pursue groups of Albanian into Macedonian territory.<sup>16</sup>

Ethnic Albanians, recognizing the overwhelming military force possessed by the Serbs, are left with the choice of migrating to Albania or to Macedonia or of resisting. Major clashes take place with heavy loss of life among the ethnic Albanians. Albania attempts to provide some assistance and aid to the ethnic Albanians in Kosovo, and as a result, fighting between Albanian and Serbian armed forces erupt. Ethnic Albanians in Macedonia also participate in attempts to aid their brethren in Kosovo.

The Serb government denies responsibility for the intrusions into Macedonia, claims that it is respecting the border with Macedonia, and says the acts are the work of Albanians trying to provoke an intervention. U.S. Peacekeeping troops in Macedonia suddenly find themselves caught in the middle. A U.S. Army squad on patrol is ambushed and destroyed. Other forces take casualties resulting from artillery fire and from recently placed minefields. A dozen Serbian T-55 tanks along with infantry soldiers are spotted digging into fighting positions; some little more than a half-mile away from the Macedonian border. Albania and Serbia trade charges accusing each other of being



responsible, but evidence points to a "greater Serbia" paramilitary group.

Macedonia is left with no other option than to request for international assistance.<sup>17</sup>

The main U.S. interest is to limit further Serbian aggression and to prevent a regional war. A lengthy and indecisive conflict in Macedonia would quite likely lead to a regional war that would also involve Serbia, Albania, Bulgaria, Greece, and Turkey, with the latter two on opposite sides. If fighting between Greece and Turkey were to erupt, the war could mean the end of NATO in its present form. The U.S. is prepared to go to great lengths to keep the alliance from unraveling. In addition, a regional war in the Balkans could create a large and unmanageable refugee flow that would cause further social and political problems in Western Europe. The strong U.S. Peacekeeping presence in Macedonia is recognition of the importance to U.S. interests of preventing the spread of fighting to Macedonia.<sup>18</sup>

### *The Mission*

The U.S. decides to respond to Macedonia's request by deploying the 3d ACR as an operationally significant force into the AO. This force must be capable of performing peace operations and, if necessary, of performing limited offensive and defensive operations in order both to prevent the killing of ethnic Albanian refugees fleeing south into Macedonia and to protect Macedonian sovereignty along a predetermined section of the border.<sup>19</sup>

This operationally significant force must be able to deploy rapidly and must possess the necessary lethality, force protection, and ability to sustain itself

while deployed. The force must be organized to perform both reconnaissance and security operations. Due to the rugged, mountainous terrain and lack of a developed road network, airmobile assets will be necessary to transport and supply dismounted soldiers conducting patrols and manning observation posts. A credible armored force is required to fortify defensive positions along potential enemy mechanized avenues of approach and to provide route security.

## CHAPTER 3

### MILITARY ACTIONS

The first criteria for determining if the 3d ACR is operationally significant is whether it possesses the means to conduct a variety of military actions required in the MTO environment. These military actions must support the JTF or land component commander's ability to accomplish his mission, goals, and objectives. This monograph created a specific scenario from which it derived a mission stating that the ACR deploy to the MTO to conduct peace operations and if necessary, conduct offensive or defensive operations in order to prevent the killing of ethnic Albanian refugees fleeing south into Macedonia from Kosovo, and to protect Macedonian sovereignty along the Macedonia-Kosovo border. The scenario (pages 9-11) implies that the 3d ACR should be capable of conducting peace operations that include, peace enforcement, peacekeeping, show of force, support for insurgency and counterinsurgency, attacks and raids, and arms control. Additionally, the implied tasks for offensive and defensive operations will include reconnaissance and security operations, tasks that the ACR is specifically configured to perform. What must now be determined is whether the 3d ACR can effectively conduct these various military actions in this prescribed environment.<sup>20</sup>

The ACR is primarily organized to conduct reconnaissance and security operations. Reconnaissance operations are intended to obtain information on an enemy, potential enemy, or the characteristics of a particular area. Its overall purpose will be to identify and report on all hostile or potentially hostile actions within a designated area within the MTO, particularly along the Macedonia-

Kosovo border. Security operations are conducted to provide reaction time, maneuver space, and protection to the U.S. forces operating within the Regiment's AO. Security operations are characterized by aggressive reconnaissance to reduce terrain and enemy unknowns, to gain and maintain contact with a hostile force to insure continuous information, and to provide early and accurate reporting of information to protect the force. While conducting either of these operations, the ACR retains the agility to transition to a hasty attack, movement to contact, or a defense in sector. These operations will allow the Regiment not only to monitor developing situations, but to respond to them as well.<sup>21</sup>

According to doctrine, an ACR can conduct reconnaissance and security operations along a 100-120 kilometer frontage. The border between Macedonia and Kosovo is approximately 175 kilometers in length. Although this distance is beyond the established doctrinal parameters of reconnaissance or security operations, the terrain's characteristics along the border will likely permit the ACR to adequately extend its capabilities along the entire border. Because the terrain is characterized by numerous thickly vegetated mountains, the migration refugees tend to utilize the existing road network to travel. Additionally, the location of towns, refugee camps, and other population centers are known. These characteristics will allow the ACR to concentrate its efforts within a prescribed area. However, one drawback as a result of the environment is that the terrain creates the need for dismounted infantry to conduct patrolling and establish observation posts, particularly in areas that prevent the movement of mechanized vehicles.<sup>22</sup>

## *Peace Operations*

Peace operations is a broad term that encompasses peacekeeping operations and peace enforcement operations conducted in support of diplomatic efforts to establish and maintain peace. Peace operations are part of what the military refers to as operations other than war (OOTW). The events occurring in this scenario as well as those that are actually occurring in the Balkans (March - April 1999) clearly indicate that OOTW will not always consist of peaceful actions. Determined opponents such as the Serbian military and paramilitary forces can quickly resort to combat operations or other aggressive acts in an attempt to promote their purpose. Consequently, the OOTW environment is a complex one that will require disciplined, versatile Army forces to respond to different situations, including transitioning rapidly from OOTW to wartime operations and vice versa. While the dividing line is not always clear, commanders should plan for combat operations as a branch to any peace operation to ensure he can retain the initiative.<sup>23</sup>

Based upon the events presented by the scenario, the ACR will initially be required to conduct peace enforcement operations. Peace enforcement operations are military intervention operations intended to restore peace and to establish conditions for peacekeeping to occur. These operations may begin without the mutual consent of both hostile factions. The scenario indicates that Serbian military and paramilitary forces are attacking villages and refugee camps along the Macedonian-Kosovo border, and have positioned armored vehicles along the northern side of the Macedonian-Kosovo border. Peace enforcement operations will require that the ACR be prepared to apply elements of combat

power to restore order to facilitate separating the warring factions and to restore the environment to conditions more conducive to civil order and discipline.<sup>24</sup>

Once the ACR stabilizes the conflict between the Serbs and ethnic Albanians along the border, peacekeeping operations can begin. Peacekeeping operations support diplomatic efforts to maintain peace in areas of potential conflict and would require the consent of all parties involved in the dispute. The presence of the ACR's combat forces would be intended to deter violent acts by its physical presence at violent-prone locations such as villages, refugee camps, and along the migration routes used by the ethnic Albanians moving across the border. The ACR would be required to conduct tasks such as being impartial observers or providing supervisory and assistance.<sup>25</sup>

Show of force operations lends credibility to the U.S. commitment of stopping and preventing the spread of fighting in the Balkans. The appearance of a credible military force such as the ACR will underscore the U.S. national policy interest and its commitment, provide an insight into U.S. values, and improve Macedonia's military readiness and moral.<sup>26</sup>

In the scenario, Serbian forces are freely ignoring the Serbian-Macedonian border. These forces are infiltrating Macedonia in an attempt to disrupt its government through subversion, lawlessness, and insurgency. Conversely, the U.S. will support counterinsurgency operations to oppose Serbian aggression. Although these activities are often covert and require special operation forces (SOF) involvement, the ACR possesses capabilities that can contribute to the operation. Furthermore, the vastness of the MTO (9,927 square miles or approximately the same area as the state of Massachusetts) will require significant insurgency and counterinsurgency support from the

Regiment.<sup>27</sup>

The ACR must also be prepared to conduct across-border raids or attacks against Serbian forces or installations. These operations would be conducted to seize and maintain political and military initiatives. The intent of these attacks is to damage or destroy high-value targets such as air defense weapons, armored vehicles, or bridges used by the Serbian forces in an attempt to demonstrate the U.S. capability to achieve favorable results. These operations would be conducted by elements of the ACR, SOF, and air power acting independently or in concert with one another.

The final operation is arms control. Once the different factions involved consent to maintain the peace, the ACR will likely be tasked to verify the status of an accepted arms control agreement between the Serbs and ethnic Albanians. This task may include overseeing the movement of all heavy weapons to designated storage sites, and the movement of factional armies to cantonment areas where the demobilization of the majority of their forces would occur. The purpose of this operation would be to verify that combat equipment was not being used with the intent of reinitiating hostile activities between the warring factions.<sup>28</sup>

The capabilities of the ACR will allow for either the successful accomplishment or to support the successful accomplishment of the identified tasks. A deficient critical capability in the ACR is its lack of dismounted infantry soldiers. Dismounted infantry will be instrumental if the ACR is to successfully accomplish the identified tasks particularly in this environment marked by numerous mountains covered with rich vegetation, and operating against indigenous forces capable of conducting substantial dismounted operations. A dismounted infantry capability is necessary to conduct patrolling, occupy

observation posts, support main supply route (MSR) security, serve as part of a rapid reaction force, facilitate operations in built-up areas, and augment the air and sea port security force. Augmentation from a light infantry battalion would provide the additional combat power required to perform the identified tasks.<sup>29</sup>

Other capabilities likely required to successfully accomplish the tasks are those provided by Special Force (SF) Civil Affairs (CA), Psychological Operations (PSYOP), and fire support organizations. A SF package consisting of a Special Operations Command and Control Element (SOCCE) and Operational Detachments Alpha (ODA) will be required to perform area assessments and provide intelligence collection and dissemination to U.S. forces. A CA detachment would promote the relationship between the U.S. forces located in the MTO and the civil authorities and people of Macedonia, Kosovo, Serbia, and Albania.<sup>30</sup>

A Brigade PSYOP Support Element (BPSE) will provide the necessary PSYOP augmentation. A BPSE consists of a command and control section and three or more tactical PSYOP teams (TPTs). The exact BPSE composition is based upon its commander's estimate of the situation. The BPSE is organized with a PSYOP production center capable of producing leaflets, and creating and transmitting messages that are intended to persuade and influence the indigenous population. The information delivered by the BPSE must support the themes and objectives that are sanctioned by the National Command Authority (NCA). These messages are delivered by ground or helicopter-mounted public address (PA) systems, and through the distribution of leaflets. The 4<sup>th</sup> PSYOP group is the only active duty PSYOP organization. If this group is involved with operations elsewhere, a reserve component (RC) organization must be activated.



Activating any RC organization requires a U.S. presidential call-up.

Consequently, estimate forty days after notification for the reserve BPSE to prepare and deploy to the MTO. The BPSE along with its equipment can be transported aboard a single C-141 aircraft.<sup>31</sup>

A Target Acquisition Battery (TAB) and a multiple rocket launch system (MLRS) will provide critical fire support augmentation. TABs provide the counterfire capability that the ACR does not possess. TABs are organized with three Q-36 and two Q-37 radars that are designed to acquire both artillery and mortar indirect fires, calculate the munition's point of origin, and immediately transmit that information to the Regiments fire direction center. Ideally, counterfire targeted against the belligerents indirect fire weapons can then occur before the enemy's weapon system is able to displace. If the operational commander's assessment of the threat capability suggests additional fire support augmentation, multiple rocket launch systems (MLRS) may be requested. Augmentation might include a MLRS battalion (twenty-seven launchers) or a MLRS battery (nine launchers).<sup>32</sup>

## CHAPTER 4

### TRANSPORTING THE 3d ARMORED CAVALRY REGIMENT

Deploying the 3d Armored Cavalry Regiment (ACR) from Fort Carson, Colorado, to Macedonia will require the transportation of 123 M1A2 Abrams tanks, 127 M3A2 Bradley Fighting Vehicles, hundreds of wheeled and other tracked vehicles, seventy-four helicopters of various types, and approximately 4,456 soldiers. Additionally, non-organic combat service support (CSS) required to sustain the ACR when it arrive in the Macedonia Theater of Operation (MTO) will also deploy from CONUS; these additional assets will be identified in chapter five.<sup>33</sup>

In order to determine the number of days required to deploy the ACR from the continental United States (CONUS) to Macedonia, this monograph will divide the deployment sequence into four phases. These phases are predeployment activities, deployment from fort to port, movement from port to port, and in theater Reception, Staging, Onward Movement, and Integration (RSOI). The deployment of the ACR's equipment will be discussed first, followed by a discussion of the deployment of its soldiers. Additionally, accessing the assets from the Army Pre-positioned Afloat (APA) as an alternative to deploying the ACR's equipment from CONUS will be presented as a possible option.<sup>34</sup>

Predeployment activities consist of a series of events that prepare a military organization's equipment and soldiers to successfully deploy from its current location to another location. Much of the predeployment activities are identified in the unit and installation movement SOP and are conducted or coordinated for prior to a unit's deployment notification (N -day). Other

predeployment activities such as configuring the vehicles for transportation are generally conducted after notification occurs.<sup>35</sup>

Attempting to anticipate the status of a military organization at the time it receives deployment notification is virtually impossible. It is very probable that the unit might be deployed to a Combat Training Center (CTCs), or that the unit could be conducting maneuvers in the local training areas. Events such as these can significantly influence the amount of time necessary to prepare a unit for deployment. Therefore, in order to adjust for a variety of unanticipated conditions, this monograph makes the following predeployment assumptions. First, upon notification, the ACR, in its entirety, is located in garrison ready to begin preparing its equipment for immediate deployment. Secondly, the current ACR's category level of fill regarding personnel and equipment, the training of those personnel and the maintenance of the equipment (referred to as C-rating) is at category 1, indicating that the ACR is fully mission capable. Third, the soldiers are trained in the necessary deployment tasks that permit the unit to deploy with as little external support as necessary. Fourth, the Installation Transportation Office (ITO) possesses all the blocking, bracing, packing and tie-down material necessary to support the ACR's deployment. Lastly, because competing demands for transportation assets routinely exist between two or more units attempting to deploy, this monograph assumes that no higher-priority crisis requiring immediate U.S. response by another military organization is occurring. These assumptions will permit the ACR to be postured and to receive the transportation assets required for immediate deployment.<sup>36</sup>

Port to port activities consist of operations necessary to move a unit from its home station to its Port of Embarkation. The Port of Beaumont, located

vicinity Houston, Texas, is the ACR's primary Seaport of Embarkation. This port possesses the essential infrastructure features required to transport the ACR's equipment by sealift. Beaumont is also the location where the three Fast Sealift Ships (FSS), a requirement to transport the ACR, are harbored. Additionally, Beaumont has two FSS compatible berths that will permit the simultaneous loading of two ships.<sup>37</sup>

DA policy requires the maximum use of commercial lift capabilities in CONUS for unit deployments involving the movement of unit equipment. Maximum use of these capabilities will reduce wear and tear on tactical wheeled vehicles, minimize requirements for enroute support, and reduce maintenance requirements at marshaling areas. Therefore, the 3d ACR will transport all ground vehicles by rail from Fort Carson to the Port of Beaumont. Helicopter assets are permitted to self-deploy to the Port of Beaumont where they will then be prepared for loading aboard ship.<sup>38</sup>

To transport the 3d ACR by rail requires 718 rail flat cars. The Fort Carson rail infrastructure has the capacity to handle 230 rail cars per day. Upon notification, the transportation agency responsible for providing rail support to Fort Carson can assemble and position the first set of 230 rail cars within forty-eight hours. Therefore, C+3 is the earliest time the loading of the first set of rail cars can begin.<sup>39</sup>

Once the first set of rail cars departs Fort Carson, a second set of 230 rail cars can be assembled and positioned for the loading process to continue. This process of assembling sets of 230 rail cars can continue uninterrupted until the ACR's equipment is entirely deployed from Fort Carson. Deploying the ACR will require three sets of 230 rail cars plus a forth set of twenty-eight rail cars.<sup>40</sup>

Loading each set of 230 rail cars will require three days. Assuming that the first set of equipment is in position and ready to begin loading at C+3, the first train can begin movement by C+6. Four days travel time is necessary to travel the 1,004 miles by rail from Fort Carson to the Port of Beaumont. Consequently, the first train will arrive at the Port of Beaumont on C+9.<sup>41</sup>

When notified, the FSS ships will require ninety-six hours to bring themselves up to operating status. Therefore, as the first rail load of equipment arrives at the Port of Beaumont, two FSS ships should be in position and prepared to receive the ACR's equipment. As vehicles are being unloaded from the rail cars they can be loaded aboard these two prepositioned FSS ships.<sup>42</sup>

Once the train arrives, two days are required to unload (C+11). Allotting one additional day to load and secure the equipment aboard ship, the first set of equipment will be secured aboard ship by C+12.<sup>43</sup>

Back at Fort Carson, the following three sets of rail cars will, in turn, begin loading as the previous train departs and the next set of rail cars is moved into position. Loading the second set of rail cars can begin on C+6, the third set on C+9, and the final set on C+ 12. Because the last set of vehicle requires only twenty-eight flat cars, the load time for this train will be adjusted to two days, and the unload time to one day.<sup>44</sup>

The entire ACR can be transported from Fort Carson to the Port of Beaumont and secured aboard ship by C+18. The time between the trains arriving at the port is six days. This separation in arrival times will allow ample time for the FSS ships to be loaded and moved into and out of berthing positions.<sup>45</sup>

Load planning assumptions must add another day to vessel loading and sailing time to take into account time-in-port factors such as piloting, docking procedures, tide and weather conditions, vessel maintenance, and cast-off procedures. The first FSS ship could therefore begin movement out of the Port of Beaumont by C+13, followed by the second ship by C+16 and the third by C+20.<sup>46</sup>

From the Port of Beaumont, the designated seaport of debarkation for this operation will be the Port of Durres, located in Albania. This port is selected for the following three reasons: First, Durres possesses the Roll-on/Roll-off (RORO) capability necessary for quick off-loading of the FSS ships. Next, the Port of Durres is the shortest distance from the Port of Beaumont to the various capable ports in the theater of operations. Lastly, the distance between the Port of Durres and the Albania-Macedonia border is only thirty-five miles. This relatively short distance will require only a single day to convoy equipment from Durres into Macedonia.<sup>47</sup>

FSS ships are capable of maintaining a cruising speed of twenty-seven knots. Travelling the 6,071 miles to the Albanian coast will require nine days and four hours per ship. Therefore, the first ship will arrive on C+22. The remaining ships will arrive on C+25 and C+29. Because the standard time to unload an FSS is two days, the separation in arrival times will provide sufficient time to conduct the initial phases of the RSOI operations.<sup>48</sup>

The process of Reception is the first stage of RSOI. It marks the end of the strategic leg of the deployment and the beginning of the operational employment of forces. Once offloaded, the vehicles will be prepared for

operations and unloaded with ammunition. This operation will require three days (C+23 to C+25). By C+26 the first shipload of equipment can begin road marching to the TAA in Macedonia. The second and third FSS ships will in turn unload, prepare for operations, and begin convoy operations by C+29 and C+33.<sup>49</sup>

The distance to convoy vehicles from Durres to a TAA in Macedonia (located vicinity Skopje) is approximately 150 miles. Due to the steep mountain terrain and the number of hairpin curves along the route, utilizing heavy equipment transports (HETs) to transport the vehicles is not practical. Since the 150-mile movement can realistically be conducted in two days, the vehicles convoying from Durres will move under their own power to occupy the TAA.

To facilitate the Regiment's movement from Durres to Skopje, augmentation from two combat engineer companies, possibly an entire combat engineer battalion should deploy along with the ACR. The combat engineers are capable of repairing damaged roads, constructing new roads, reinforcing existing bridges along the route, and where possible, creating bypasses around the bridges for those vehicles that surpass the load bearing capacity of the bridge.<sup>50</sup>

Once the last march unit has closed on the TAA, the ACR will be prepared to conduct operations within forty-eight hours (C+38). Having determined the time required to transport equipment from Fort Carson to Macedonia, it is now necessary to estimate the time required to transport the soldiers.

Deploying the 4,456 soldiers of the ACR to Macedonia can be accomplished using military and/or civilian contracted lift. If commercially contracted 747s are utilized, the entire set of soldiers could be transported in twelve separate lifts. If military C-141s are utilized, thirty lifts will be required.<sup>51</sup>

Peterson Airforce Base (AFB), located less than fifteen miles from Fort Carson, is the designated aerial port of embarkation for the ACR. Peterson AFB is capable of handling a variety of civilian and military aircraft to include C141, C5, C17, and 747. Skopje, the capital of Macedonia, is the designated aerial port of debarkation. This airfield is capable of handling C141, C5, C17, and 747 aircraft. The working maximum on ground (MOG) capability of Skopje is eight C-141 aircraft or its equivalent.<sup>52</sup>

An average of eighteen hours of flight time is necessary to reach Macedonia from Peterson AFB. Consequently, it is quite feasible to transport the soldiers to Macedonia in less than three days. The actual quantity of time required to transport the soldiers will be based upon the quantity and type(s) aircraft utilized. What is essential to recognize is that the ability for the ACR to deploy its forces to Macedonia is dependent on the time required to transport the equipment by sealift, not the time required to transport the soldiers by air. An alternative to deploying the ACR's equipment from CONUS is to utilize the Army Preposition Afloat (APA) program and the Attack Helicopter Flyaway Package (AHFP).<sup>53</sup>

The APA program includes equipment and sustaining supplies sufficient to equip a heavy combat brigade with combat support and combat service support elements, embarked in a fleet of special and general-purpose ships that provide long-term storage. These ships, equipment, and material are integral elements of the U.S. Army Strategic Mobility Program (ASMP), and are available for rapid, worldwide deployment to support contingencies across the range of military operations. The APA equipment provides the Unified Commander with a rapid reinforcement capability to enhance an established lodgment.<sup>54</sup>



Upon notification, an APA set of selected vessels will respond to a National Command Authority requirement and depart from its on station location or join the fleet enroute to the designated contingency area. The most likely warfighter to use the APA assets are CONUS forces. These forces will be called upon to fly to the Area of Responsibility (AOR), draw and account for the APA equipment and supplies and prepare to engage in hostile operations or conduct support and stability operations.<sup>55</sup>

The APA set nearest Macedonia is APA-2 located at Livorno, Italy. APA-2 contains a balanced brigade's worth of equipment (two armor battalions and two mechanized infantry battalions), theater-opening CS/CSS units, port-opening capabilities, and sustainment stocks. Also within APA-2 are vessels that provide the initial equipment to operate improved or unimproved fixed ports and to conduct limited in-stream discharge of other APA vessels prior to the establishment of the sea lines of communication.<sup>56</sup>

However, for this particular operation, APA-2 has the following shortcoming. First, APA-2 is not loaded aboard ships, but rather stored in warehouses. When notified, six days would be required to position the ships and load the equipment. Secondly, although APA-2 contains the equipment required to field a balanced brigade, it does not contain the quantity and all the necessary type of equipment comprised in an ACR. Lastly, to compensate for the equipment shortages that exist in APA-2 would require drawing equipment from more than one APA set. In the long run more time is required to deploy the ACR to Macedonia utilizing the APA equipment than would be required if deploying the ACR from CONUS. Consequently, deploying the ACR's equipment from CONUS would be the preferred method.<sup>57</sup>

Aviation assets required of the ACR are not part of the APA program. The helicopter element of the ACR can be delivered by the AHFP. The AHFP can deliver an attack helicopter battalion within forty-eight hours. Within eighteen hours of notification, an AH-64 Apache Company can be in the air enroute to any strategic destination where C-17 aircraft can land. Requiring only four C-17 sorties, the company package includes eight Apache helicopters, thirty-three soldiers, and its combat service support for maintenance operations. Within forty-eight hours, an AH-64 Apache Battalion can be deployed on an additional eleven C-17 sorties. A draw back to the AHFP is that cavalry air and ground elements operate best as a combined arms team. Though the AHFP arrives early in the deployment cycle, the ground elements do not arrive until C+37.<sup>58</sup>

Deploying a force relatively quickly is one of the three characteristics required of an operationally significant force. When compared to a light infantry force that is capable of deploying worldwide within forty-eight hours, thirty-seven days to deploy the 3d ACR may appear to long. However, if the ACR can posture itself in Macedonia and establish the conditions identified by the CINC, then thirty-seven days may be acceptable. In this particular scenario, if the ACR could be postured in time to save lives and prevent a major humanitarian catastrophe, thirty-seven days is acceptable. On the other hand, if the ACR does not begin deploying until the Serbian aggression has begun in full earnest, then thirty-seven days is too long of a deployment and the ACR may no longer be operationally significant when it arrives in Macedonia. To meet the deployment criteria, the ability for the United States to accurately anticipate future events will be the difference between the ACR being operationally significant or not.

## CHAPTER 5

### SUPPORTING AND SUSTAINING THE 3d ACR

Logistically supporting and sustaining the 3d ACR once it arrives in the Macedonia Theater of Operation (MTO) may present significant combat service support (CSS) challenges for the following reasons. First, Macedonia is an undeveloped theater where the existing logistical support structure is not adequate. This will require that the preponderance of the logistics necessary to sustain the ACR be delivered into the theater. Secondly, the ACR is a unique organization in that it contains a substantial quantity and diverse set of combat and combat support (CS) equipment. The ACR is a combined arms organization composed of three ground squadrons that together contain more tanks and Cavalry Fighting Vehicles (CFV) than an armored or mechanized brigade, an aviation squadron that contains more aviation assets than an attack aviation battalion, and five separate combat support elements that include three howitzer batteries and chemical, engineer, air defense, and military intelligence troops. Additionally, one other unique feature of the ACR is that it possesses its own organic support squadron. Thus, although the Regiment is a non-divisional unit, it will require support similar to a division in type and quantity.<sup>59</sup>

The primary purpose of the 3d Armored Cavalry Regiment is to perform reconnaissance and provide security for a corps. As the "eyes and ears" of the corps commander, the ACR is organized to operate well forward and/or to the flanks of the corps main body in order to provide the commander with situational awareness and enhances his ability to maneuver successfully. The Regiment's wartime mission is to conduct cavalry operations as part of III Corps. III Corps

receives its support from the 13th Corps Support Command (COSCOM).

Consequently, under normal operating conditions, the ACR would receive its support from the 13th COSCOM as well. However, deploying the Regiment to Macedonia is a "non-standard" mission. Since III Corps is not deploying to Macedonia, the 13th COSCOM is not likely to deploy.<sup>60</sup>

In order to operate forward of the corps main body, the 3d ACR's support squadron is structured to provide some unique CSS capabilities that will permit the Regiment to be self-sufficient for a predetermined period of time. The support squadron is organized similarly to the forward support battalions (FSB) of separate brigades. Although the support squadron has the same capabilities as the FSB of a separate brigade, the troops in the support squadron are significantly different from those of the companies in the support battalions. The squadron's troops consist of a headquarters/material management center (MMC) troop, a supply and transportation (S&T) troop, a maintenance troop, and a medical troop.<sup>61</sup>

The MMC troop provides the ACR with centralized and integrated material management for classes I, II, III, IV, VII, and IX supplies and maintenance. It requests and distributes all authorized supplies needed by the Regiment and manages maintenance work load and class IX supply system for all units organic to the ACR. This particular feature provides the Regiment the unique capability to request and receive supplies and scheduled maintenance support directly from the corps' MMC organization.

The S&T troop supports the ACR by receiving, storing and issuing class I, II, III, IV, and VII supplies. The troop is capable of storing 113,600 gallons of bulk POL. It is able to operate an ammunition transfer point (ATP) and is capable of

providing water purification with limited distribution. The transportation platoon of the S&T troop together with the squadron support platoons and the lift assets of the UH-60 troop provide the Regiment with a robust transportation capability.<sup>62</sup>

The Maintenance troop provides direct support (DS) maintenance and repair parts supply to the ACR. It provides one maintenance support team (MST) per squadron and maintains an authorized stockage list (ASL) up to 3,000 lines. The troop is capable of providing limited general support (GS) maintenance. This maintenance capability is structured to reduce the ACR's reliance on higher-level maintenance support.<sup>63</sup>

The Medical troop is organized to provide regiment-level and unit-level combat health support, as required on an area basis and also to units that operate in the Regimental area that are not otherwise provided this support. The medical platoon performs triage, urgent initial surgery and stabilization, and prepares sick, wounded, or injured patients for evacuation. It contains a Treatment Platoon that operates a clearing station. Additionally, the medical platoon provides emergency and sustaining dental care, limited medical laboratory and radiology services commensurate with division-level treatment, and provides patient holding for up to forty patients who will return to duty within seventy-two hours. Assets available to the troop include eight HMMWV and eight M113 ambulances.<sup>64</sup>

It is clearly evident that the ACR's combat capabilities and CSS structure are much more robust than those of other non-divisional size combat unit. It is this unique characteristic that permits the ACR to accomplish its normal mission without depending upon CSS augmentation. However, operating in a non developed theater without the CSS support from 13<sup>th</sup> COSCOM will cause the

Regiment to experience logistical complications that will compromise its ability sustain itself.<sup>65</sup>

Although the ACR is configured with a robust CSS capability, the limitations will exist that will prevent the Regiment from sustaining itself once deployed. For example, although the ACR is capable of maintaining a substantial quantity of fuel, the accumulated consumption rate of the tanks, helicopters and other combat equipment will easily deplete this supply within the first few days of the operation. Consequently, it will be necessary to augment the ACR with a petroleum supply company. A petroleum supply company is capable of establishing and operating temporary petroleum storage facilities for GS of division and non-divisional units. It is capable of establishing and operating bulk class III supply points, providing limited mobile filling stations, and can store 2,400,000 gallons of bulk petroleum, or just over twenty-one times the holding capacity of the Regiment's support squadron. The company also possesses eighteen fuel bags capable of holding 500 gallons each that can be transported about the battlefield by air or ground assets to establish forward fueling points. This petroleum company will provide the ACR the necessary fuel support to perform sustained operations.<sup>66</sup>

Another CSS constraint results from the fact that the Regiment does not normally maintain a reserve stock of class V supply. The Regiment has the ability to maintain only a basic-load worth of ammunition with its units. Therefore, augmentation from elements of an ammunition company (ammunition detachment) will be required. An ammunition detachment is capable of establishing and operating three geographically dispersed ammunition supply points (ASPs) engaged in receiving, storing, rewarehousing, combat configuring,

and issuing conventional ammunition using the palletized loading system (PLS). Also, this detachment can operate one ammunition transfer point (ATP) engaged in transload operations. Because the Regiment must be prepared to transition to combat operations, it must be provided this capability of storing additional ammunition and the means of immediately distributing that ammunition when required.<sup>67</sup>

Although the ACR has organic transportation assets that include the motor transportation platoon, the squadron support platoons, and the UH-60 troop, additional assets will be necessary to transport supplies and soldiers within the theater. These additional transportation assets should consist of a medium helicopter company (sixteen x CH-47s), a medium truck company (Palletized Loading System (PLS)), and a light-medium truck company. The helicopter company will provide the support necessary to move ammunition, repair parts, and petroleum products as well as the tactical movement of artillery, troops, and special weapons quickly about the AO. A medium truck company (PLS) and light/medium truck company is necessary to transport general noncontainerized cargo from corps GS units/supply points to DS units/supply points. These two truck companies will provide the Regiment with forty-eight PLS vehicles with trailers, fifty 5-ton cargo trucks, and ten 5-ton tractor trucks with twenty-five 22 ½ ton semi trailers. As previously discussed, the Macedonia and Albanian road network are characterized by steep roads with several hairpin turns. Therefore, utilizing HETs to transport the Regiment's equipment is impracticable.<sup>68</sup>

A maintenance company is necessary to augment the squadron maintenance troops as well as any additional CSS forces arriving with the ACR. A maintenance company can provide DS maintenance and repair parts supply

services commensurate with stated capabilities for non-divisional units assigned to or passing through its area. It is capable of requisitioning, receiving, and distributing all class IX items arriving into its area. It also provides backup support for divisional units. This company's capabilities include automotive and computer repair, small-arms and communications-electronic repair, engineer equipment and power-generation repair, and metalworking. This company will provide all DS maintenance for the non-ACR forces operating in its area. The aviation unit maintenance (AVUM) platoon from the medium helicopter company has DS capability and is able to provide maintenance and class IX support to the ACR's aviation squadron.

Additional medical support will be another critical function requiring augmentation particularly when considering the lack of host nation medical support available and the possibility of conducting combat operations. A Forward Surgical Team (FST) will provide a rapidly deployable, immediately available surgical capability to patients who cannot withstand further evacuation. It provides surgical support forward in an ACR's operational area. The FST is capable of continuous operations with an ACR's medical troop. The team conducts emergency medical treatment and surgery with its organic medical equipment sets sufficient to provide initial surgery and postoperative care for up to thirty critically wounded patients over a period of seventy-two hours. Additionally, elements from a Medical Evacuation Battalion, a medical company (air and ground ambulance) will be required. Elements from the medical evacuation battalion will provide the command and control to air and ground medical evacuation elements within their area.<sup>69</sup>

The CSS limitations just identified are but a few logistic functions that



require augmentation. Additional CSS assets necessary to support the ACR in this theater will include two a Cargo Transfer platoons to manage and operate port activities at Durres and Skopje;<sup>70</sup> a Transportation Movement Control team to perform movement functions for moving personnel and material from fixed terminals such as ports and airfields;<sup>71</sup> a Petroleum Pipeline and Terminal Operating company to operate petroleum terminal facilities for receiving, storing, bulk transferring, issuing, and distributing all bulk petroleum shipped into the theater;<sup>72</sup> a Water Purification detachment capable of producing potable water for corps and theater area units;<sup>73</sup> a Force Provider package;<sup>74</sup> three Military Police platoons (GS) to assist with area circulation; a Mobile Subscriber Equipment (MSE) element to establish and maintain a communications blanket over the theater of operation;<sup>75</sup> a personnel and finance detachment and replacement platoon to provide personnel support on an area basis, twenty-four hours a day; and a Press Camp headquarters to provide news briefings, press conferences, and escort control and support for the media personnel.<sup>76</sup> While additional logistical augmentation may still be required, the intent here is to clearly document that in order to adequately support and sustain the ACR, a substantial and diverse quantity of CSS assets will be required. But the question arises: If the ACR is organized to be logistically self-contained, why is so much CSS augmentation necessary?

Deploying to the MTO as an independent force is not a normal mission for the 3d ACR. Though the ACR is organized with an extremely capable CSS structure, it is not capable of operating independently in an environment such as the one depicted in this monograph. The 3d ACR is organized to conduct tactical-level missions as part of III Corps and is therefore structured to sustain

itself with its organic tactical-level CSS capabilities. Requiring the ACR to conduct an independent operational-level mission will require operational-level CSS capabilities, something the ACR is not organized to handle. Consequently, significant CSS augmentation is necessary for the ACR to sustain itself.<sup>77</sup>

Given that the 3d ACR is only capable of sustaining itself for a relatively short duration once deployed without the CSS augmentation as identified, how will the Regiment sustain itself in the MTO without the 13<sup>th</sup> COSCOM deploying with the Regiment?

### *Corps Support Group*

Although the 13th COSCOM is not deploying to Macedonia it still retains the responsibility of supporting subordinate units assigned to III Corps such as the 3d ACR. To accomplish this requirement, the COSCOM will configure a subordinate support organization called a corps support group (CSG) to deploy with the 3d ACR for the intended purpose of providing the previously discussed additional CSS assets required to sustain and support the Regiment. A CSG is created to support forces whose requirements far exceed their TOE design capabilities to include resources that arm the soldier and his weapon systems; fuel tanks, aircraft, and vehicles; evacuate and repair or exchange damaged items; and transport supplies, equipment, and soldiers across the battlefield.<sup>78</sup>

There is no standard CSG organization structure. Therefore, the 13th COSCOM commander will task organize and tailor the CSG based on support requirements established by the 3d ACR's commander, the support squadron commander, and the Regimental logistician. Support will be tailored to overcome

the difficulties inherent throughout the entirety of this particular operation beginning with the predeployment phase.<sup>79</sup>

Although CSG units normally deploy with follow-on forces, the bare base environment of Albania and Macedonia will require a significant portion of the CSG to deploy as part of the initial force package. The CSG's purpose for arriving early is to set up a CSS infrastructure to begin supporting the ACR as it arrives in theater, starting with port facility operations.<sup>80</sup> The CSG infrastructure will configure to provide continuous GS level supply, ammunition, and petroleum support as well as to provide reinforcing DS maintenance and field services support to the Regiment and any other organization, either a sister service or an ally, operating within the ACR's area of operation.<sup>81</sup>

The length of the Regiment's lines of communications and the rapidity with which it may transition from peace operations to combat operations or vice versa, can stress the support channel from the CSG. To adequately support the ACR, the CSG must possess the capability to conduct split-based operations. Split-based operations will permit the CSG to operate from more than one location to minimize the logistical footprint in the theater of operation and conduct a more responsive CSS operate. However, the split-based operations will be heavily dependent upon assured communication, movement control, and information management systems. The CSG is designed to provide the command and control structure capable of providing integrated material management, transportation planning, movement control, and highway regulation.<sup>82</sup>

The logistical challenges involved with logistically sustaining and supporting the ACR once it arrives in the MTO can be readily overcome. This particular operation will require the 13<sup>th</sup> COSCOM to organize and deploy a CSG

capable of manning, arming, fueling, fixing, moving, and sustaining the soldiers and their equipment assets to provide the ACR with operational-level CSS.

These CSS assets will increase the sea vessel requirement to four FSS ships.

To provide the necessary support, much of the CSS capability must arrive as part of the initial force package in order to quickly establish and begin support operations. The requirement for one additional FSS vessel will impact the overall time necessary to posture the ACR in Macedonia by 3 additional days.

Consequently, the Regiment will be prepared to conduct operations by D+41.<sup>83</sup>

## CHAPTER 6

### CONCLUSION

The purpose of this monograph was to determine if the 3d Armored Cavalry Regiment possesses sufficient capabilities to be an operationally significant force operating in a Macedonian Theater scenario. To answer the question this monograph applied three evaluation criteria. First, does the ACR possess the capability to conduct the variety of military actions necessary to accomplish its assigned mission? Second, is the ACR capable of deploying quickly enough to the MTO to create conditions that support the military objective? Lastly, can the ACR logistically support itself for a designated period of time once it arrives in theater? In order evaluate the ACR based upon these three criteria, a near-term scenario based upon the current (1999) situation in Macedonia was created.

This scenario created an environment requiring the ACR to conduct a variety of military operations. This monograph determined that without significant augmentation from assets such as a light infantry battalion, Special Forces, engineers, military police, psychological operations, civil affairs, signal, and fire support, the ACR was not capable of achieving the operational purpose of the military operation. Therefore, it can be conclude that the Regiment, with only its organic assets, does not meet the first requirement necessary for an operationally significant force.

After the ACR is augmented with the necessary combat, CS, and CSS support required to achieve the mission's operational purpose, four FSS ships, approximately eighteen commercial 747 aircraft, along with forty-one days are

sufficient to deploy the ACR beginning at notification (C-day) through the time required for the ACR to be postured along the Macedonia-Kosovo border. The transportation requirements (ships, trains, and aircraft) needed to deploy the Regiment are readily available if the ACR is not competing for transportation assets with another higher-priority military force that is simultaneously deploying. Requiring forty-one days to arrive in the MTO is acceptable if the ACR is postured in time to save lives and prevent a major humanitarian catastrophe. However, if the ACR does not begin deployment until after the Serbian aggression has begun in full earnest, then the forty-one days is too long of a deployment and the Regiment may no longer be operationally significant when it arrives in the MTO. Consequently, the answer to the second criteria is dependent on circumstances.

The logistical requirement necessary to sustain the Regiment in the MTO's bare-base environment is substantial but not unexpected. Although the ACR is organized with unique and robust CSS capabilities that include its own support squadron, the Regiment is not organized to operate independently in an environment such as the MTO. Augmentation from Military Traffic Management Command assets, petroleum, ammunition, transportation, maintenance, medical support, water purification, and force provider is required. The U.S. Army has anticipated this requirement and has consequently created CSGs that configure specifically to the need of the force and that deploy along with it. Although the MTO presents significant CSS challenges, a support structure can readily be organized that will adequately support the operation.

In conclusion, the 3d ACR does not meet the criteria of an operationally significant force given the scenario presented in this monograph. Although the

ACR contributes a significant portion of the combat capabilities required to achieve the operational purpose of the military operation, its combat support and combat service support needs will definitely require substantial augmentation, some of which, specifically PSYOP organizations, will require presidential call-up. The U.S military has stated that most future military operation will likely require support from joint, multinational and interagency forces. Consequently, the ACR will not likely conduct independent operational-level operations. However, with reinforcement, the combined arms nature, organization and command and control structure inherent to the Regiment makes it ideally suited to force packaging in support of various types of operations ranging from peace operations to combat operations in both joint and multinational environments.<sup>84</sup>

## END NOTES

---

<sup>1</sup> The White House, *A National Security Strategy for a New Century* (Washington DC: Government Printing Office, October 1998), p. 23. This portion of the NSS was focused on those activities that must be conducted now in order to prepare for an uncertain future.

<sup>2</sup> Alvin and Heidi Toffler, *War and Anti War* (New York: Little, Brown and Company, 1993), pp. 13-14. The reading provides examples of potential wars and intrastate conflicts that exist worldwide. Since the end of World War II there have existed an estimated 150-160 wars and civil conflicts around the world. An estimated 7,200,000 soldiers have lost their lives in the process. If civilian losses are added in the number rises to an astronomical 33 to 40 million. Looking specifically between the years 1945 to 1990, of the 2,340 weeks that passed, the world has only witnessed three weeks that were truly war-free.

<sup>3</sup> The White House, *A National Security Strategy for a New Century* (Washington DC: Government Printing Office, October 1998), pp. 1-23. Department of the Army, *FM 100-5, Operations: Revised Final Draft* (Washington DC: Government Printing Office, June 1998), pp. 5-2 to 5-8.

<sup>4</sup> Casper Weinberger and Peter Schweizer, *The Next War* (New York: Regnery Publishing, Inc, 1996), pp. xiii-xv.

<sup>5</sup> *FM 101-5 Operational Terms and Symbols FM 100-5, Operations: Revised Final Draft* (Washington DC: Government Printing Office, June 1998), p. 5-2 to 5-8. This FM defines four forms of operations: offense, defense, support and stability operations. Offense is to deter, defeat, or destroy an enemy. Defense is to deter, contain, repel, or defeat an enemy attack and prevent him from achieving his objective. Support establishes goals to promote a change. A force may stabilize a situation as it separates hostile parties and reestablishes order, as in Bosnia. Creating stability may alleviate the need for an action that's predominating purpose is either offensive or defensive. Stability is a broad range of threats, from men in arms to large-scale disasters, may stand in the way of establishing a stable and secure environment. Stability then does not direct actions toward an enemy, but seeks to prevent events that would disrupt or end efforts to create a secure and stable environment. U.S. goals are generally to reestablishment of the status quo ante. Each of these types of actions is present in nearly every operation.

<sup>6</sup> Thomas Donnelly, Margaret Roth, and Caleb Barker, *Operation Just Cause* (New York: Maxwell Macmillan International, 1991), p.24-25.

<sup>7</sup> Robert D. Kaplan, *The Ends of the Earth* (New York: Random House, 1996), pp. 32-70. Robert Kaplan writes about the many ethnic, nationalist, and separatist tensions that exist in many areas of northwestern Africa. Many of the problems are a result of rapid population growth coupled with urbanization.



---

<sup>8</sup> Edward N. Luttwak, *The Grand Strategy of the Roman Empire: From the First Century AD to the Third* (Baltimore: The John Hopkins University Press, 1976), pp. 76-79; Thomas S. Szayna and others, eds. *Intervention in Intrastate Conflict: Implications for the Army in the Post Cold War Era* (Santa Monica, Ca: RAND, 1995), pp. 9-28.

<sup>9</sup> William J. Durch, *UN Peacekeeping, American Politics, and the Uncivil Wars of the 1990s* (New York: St. Martin's Press, 1996), pp. 312-317.

<sup>10</sup> Mark Hewishm and Rupert Pengelly, Warfare in the Global City: "The Demand of Military Operations in Urban Terrain." *Jane's International Defense Review* (June 1998), pp. 23-28.

<sup>11</sup> Luttwak, xvi; Kaplan, 24-72.

<sup>12</sup> Luttwak, xvii.

<sup>13</sup> Ernest R. and Trevor N. Dupuy, *The Harper Encyclopedia of Military History: From 3500 BC to the Present*, forth ed. (New York: Harper Collins Publishers, 1993), pp. 411-412.

<sup>14</sup> The White House, *A National Security Strategy for a New Century* (Washington DC: Government Printing Office, October 1998), pp. 1-12. When the production of this monograph began (January 1999), Serbian forces had not yet initiated ethnic cleansing of the ethnic Albanians in Kosovo.

<sup>15</sup> Jon R. Anderson. "Peacekeepers Left High and Dry." *European Stars and Stripes* (March 2, 1999): 4; Michael G Roskin. "The Bosnia-Serb Problem: What We Should and Should Not Do." *Parameters*, (winter 1992-93): 21-32; Thomas, 141. Dubbed the United Nations Preventive Deployment, at least 350 American peacekeepers have been part of the international contingent here since the operation first began in 1993. Widely praised as being one of the few stabilizing influences in the troubled Balkan region, the mission was first designed to prevent the spread of fighting in Bosnia. More recently, it's been extended in six-month increments as trouble has brewed in neighboring Kosovo. This scenario is based upon predictions presented by both the RAND study and by Michael Rosin's article. The RAND study indicated that all the important elements for this particular scenario are already in place; only the spark missing. Roskin states that an independent Macedonia has nothing to do with U.S. national interests. U.S. interests lies in stopping expansionism and atrocities, rather than in creating small countries. Also, a stable Balkans does have something to do with U.S. national interests in the general sense that chaos anywhere is a potential enemy. Fighting for Macedonia independence would mean a wrong-headed and nasty war that would merely bring greater instability to the region and more civilian casualties. Whether there should be an independent Kosovo or Bosnia and its ultimate size and shape are none of the U.S. business. The fact that borders are being changed by Serbian force, on the other hand, is very much the United States business, as this undermines the

---

1975 Helsinki Final Act, which upheld the inviolability of Europe's borders. Roskin: The possibility of a Balkan war engulfing every country from Slovakia south cannot be discounted. The trigger would most likely be Serbian mistreatment of Albanians. The objective here would be to dissuade Serbia from trying to recover Macedonia by force. In 1993 international concern over the possibility of Serbian aggression against Macedonia had led to the deployment of a UN protection force (UNPROFOR) to Macedonia. This protection force currently includes a small contingent of U.S. Army troops positioned along the Macedonian border with Serbia and Albania. However, escalating military activity by Serbian forces against ethnic Albanians may require a larger commitment of U.S. ground forces if peacekeeping were to evolve into peace enforcement.

<sup>16</sup> Roskin: Serbs do not respect the existing border between Serbia and Kosovo. The government of Belgrade alleged that these were mere spontaneous actions of Serbian communities fighting for their lives. Serbia is concerned that it will lose Kosovo to Albania. The fact that so few Serbs live in the province is the root cause of the Serbian fear of the possible detachment of Kosovo and its eventual union with Albania. The Serbian army has a strong presence in the Kosovo province. Should the Serbs determine that they must rid Kosovo of ethnic Albanians, the ultra-nationalist paramilitary would step up their actions to intimidate the ethnic Albanians, while the Serb government would encourage ethnic Serbs to settle in Kosovo.

<sup>17</sup> Anderson, p 1. As of 2 March 1999, Serbian forces, possibly responding to the end of the UN mission in Macedonia, began positioning T-55 along the Macedonian border. Serbian infantry units are also fortifying their own positions.

<sup>18</sup> Roskin, 26-30. An indirect strategy of putting pressure on Serbia by political and military support for Serbia's neighbors - Albania, Hungary, and Bulgaria - might serve to contain chaos in the Balkans and could set the stage for a comprehensive Balkan-wide security agreement carried out chiefly by Europeans. However, support for Serbia's neighbors without a U.S. presence on the scene could trigger the Third Balkan War that the U.S. would wish to avoid. In other words, if the U.S. is not on the scene it may be unable to stabilize a dangerous situation. Therefore, under the previously posited scenario, the wisest policy for the U.S. would be to put forces on the ground to dissuade Serbia from trying to recover Macedonia by force.

<sup>19</sup> Roskin, 30-32: Initially, U.S. might enter Macedonia to conduct Peacekeeping. However, several risks could cause mission evolution. First, although a cease-fire is currently in place, it is in name only since the Serbs only abide by this agreement when it supports their cause. Arms are arriving in both the Serbian and Albanian communities of Kosovo. Albania by itself would be powerless to prevent ethnic cleansing in Kosovo; however, a western political and military presence in Albania would serve as a warning to Serbian nationalist against such ethnic cleansing.

---

<sup>20</sup> FM 17-95, *Cavalry Operations* (Washington DC: Government Printing Office, December 1996), p 1-15 to 1-17. FM 100-5, *Operations*, p. 13-4 to 13-8.

<sup>21</sup> FM 17-95, *Cavalry Operations*, p. 3-1 to 3-8.

<sup>22</sup> FM 17-95, *Cavalry Operations*, p. 3-1 to 3-8.

<sup>23</sup> FM 101-5-1, *Operational Terms and Graphics*, p. 1-120.

<sup>24</sup> FM 100-5, *Operations*, p. 13-7.

<sup>25</sup> FM 100-5, *Operations*. p. 13-7.

<sup>26</sup> FM 100-5, *Operations*. p. 13-7

<sup>27</sup> FM 100-5, *Operations*. p. 13-7. FM 101-5-1, *Operational Terms and Graphics*, p. 1-83.

<sup>28</sup> Stanley F. Cherrie, "Task Force Eagle", *Military Review*, July-August 1997, p. 62-72.

<sup>29</sup> Lessons Learned Report - Former Yugoslavia Republic of Macedonia, Operation Able Sentry: Operations Other than War, Center for Army Lessons Learned (Fort Leavenworth: U.S. Army Training and Doctrine Command, October 1994), and p. 16-18. Discusses the training issues and required tasks for American soldiers conducting Peacekeeping Operations (PKO) during Operation Able Sentry in Macedonia from June 1993 through May 1994; p. 53, the CA teams actively took part in most negotiations dealing with U.S. and Macedonian locals. Report identified that CA plays an integral part for any U.S. peacekeeping operation.

<sup>30</sup> FM 101-5-1, *Operational Terms and Graphics*, p 1-26.

<sup>31</sup> Interview with Major Erin Gallogly-Staver. Major Gallogly-Staver is a Military Intelligence officer with extensive background on psychological operations (PSYOP). FM 33-1, *Psychological Operations* (Washington DC: Government Printing Office, February 1993) p 2-1. FM 33-1 is classified as a restricted. PHYOPs are part of Army special operations forces (ARSOF).

<sup>32</sup> Interview with Major Steve Sanders. Major Sanders is an Artillery officer whose previous assignment with the 3d Armored Cavalry Regiment included combat operations during Desert Storm. FM 6-121, *Tactics, Techniques, & Procedures for Artillery Target Acquisition* (Washington DC: Government Printing Office, July 1996). The Q-36 radar has a planning acquisition range of 12 km and is primarily designed to acquire mortar (high angle) munitions. The Q-37 radar has a planning acquisition range of 25 km and is primarily designed to acquire artillery (long-range) munitions. When these radars are employed, they both can acquire It is recommended that these radars be positioned with overlapping coverage in the event one radar is shut down for

---

maintenance or mechanical reasons.

<sup>33</sup> The 3d ACR parent unit is III Corps, located at Ft Hood. The 3d ACR is tasked to provide security and reconnaissance to III Corps. However, in this scenario, the ACR along with its attachments are tasked to conduct an independent mission as an operationally significant force under the operational control of CINCEUR. The additional assets located at Ft Hood include engineer, military police, and support battalion equipment and soldiers.

<sup>34</sup> *FM 100-17-1, Army Pre-Positioned Afloat Operations*, (Washington DC: Government Printing Office, July 1996) p. 1-2 to 1-2.

<sup>35</sup> *H-hour* refers to the specific time an operation or exercise begins. *C-day* refers to the unnamed day on which a deployment operation begins. *N-day* refers to the day an active duty unit is notified for deployment or redeployment. *D-day* refers to the unnamed day on which operations commence or are scheduled to commence

<sup>36</sup> *AR 220-1, Unit Status Reporting*, (Washington, D.C.: Department of the Army, 1997), 8. A C-1 category indicates that the ACR possesses the required resources and is trained to undertake the full wartime mission(s) for which it is organized or designed. The resource and training area statuses will neither limit flexibility in methods for mission accomplishment nor increase vulnerability of unit personnel and equipment. The unit does not require and compensation for deficiencies.

<sup>37</sup> *MTMCTEA Reference 97-700-5, Deployment Planning Guide: Transportation Assets Required for Deployment*, (Newport News, Virginia, July 1997), D-7, Heavy Armored Cavalry chart. Interview with Fort Carson ITO representative stated that the Port of Beaumont is Fort Carson's primary Seaport of Embarkation site.

<sup>38</sup> *MTMCTEA Reference 94-700-2, Logistics Handbook for Strategic Mobility Planning*, (Newport News, Virginia, April 1994), 22. *FORSCOM Regulation 55-1* specifies Unit Movement Planning guidance. A phone interview with Fort Carson ITO representative stated that Fort Hood is responsible for port operations at the Port of Beaumont. Once the aviation assets self-deploy to Beaumont, they will then be shrink-rapped by soldiers from Fort Hood.

<sup>39</sup> *MTMCTEA Reference 94-700-2, 40*. Interview with Mr. Milton, a Ft Carson ITO representative, stated the availability and limitations of rail cars required to deploy the ACR.

<sup>40</sup> Ft Carson ITO representative, Mr. Milton.

<sup>41</sup> Ft Carson ITO representative, Mr. Milton. A phone interview with the 3d ACR's Unit Movement Officer accompanied by a fax specified the planning time associated with loading the trains.

---

<sup>42</sup> Victor L Nelson, *Power Projection of an Army Corps by C+75-on Target or Wishful Thinking?* (Fort Leavenworth, Kansas: School of Advanced Military Studies, United States Army Command and General Staff College -- Monograph, May 1998), 19.

<sup>43</sup> *MTMCTEA Reference 94-700-2*, 54, Average Shiploading and Unloading Times chart.

<sup>44</sup> Ft Carson ITO representative, Mr. Milton.

<sup>45</sup> Nelson, 19-20.

<sup>46</sup> Nelson, 22.

<sup>47</sup> *Lloyd's. Ports of the World 1994*, (United Kingdom: Lloyd's of London Press Ltd, 1994), 541. Other ports capable of supporting the debarkation of the ACR include the Port of Burgas, located on the eastern side of Bulgaria on the Black Sea, and several ports located on the coast of Greece. This port of Burgas is capable of handling a greater volume of shipping than Durres. It has two berths capable of handling the off-loading of RORO ships and will serve as an alternative debarkation site. The draw back to utilizing this port are the additional distances of 780 nautical miles from Beaumont to Burgas, and the additional distance of 270 miles to move from the Port of Burgas to the Bulgaria-Macedonia border. Greece possesses ports capable of supporting the ACR's debarkation. However, due to the unfavorable political and national relations that currently exist between Greece and Macedonia (generated by this scenario), the option to utilize Greek ports has been denied. *MTMCTEA Reference 97-700-5*, p. D-7. 2.8 FSS ships are required to transport a heavy armored cavalry regiment.

<sup>48</sup> *MTMCTEA Reference 97-700-5*, p. D-6, table D-2. Nelson, 22.

<sup>49</sup> Interview with Captain Mike Seen, 3d ACR's Unit Movement Officer. The Regiment has determined that 3 days are necessary to prepare vehicles for combat operations once offloaded from ship.

<sup>50</sup> Colonel L. D. Holder and Edwin J. Arnold, "Moving a Heavy Division," *Military Review*, (July 1998), p 35-49. Interview with the 3d ACR's Unit Movement Office. Albania and Macedonia Engineering Route Study identifies that the main route from Durres to Skopje will support M1A1 tanks. This route contains 5 minor bridges and no tunnels. This author of the study, Mr. Freece, stated that the bridges could support the weight of the tanks. Additionally, he stated that at each bridge site exists a bypass that can readily be traversed by tracked vehicles. As a result of the number of hair-pin turns along the route, transporting the vehicles by HETs would not be feasible. *Able Sentry Lessons Learned*, p. 6. The G-4 Crisis Action Team involved with deploying the force into Macedonia disclosed that due to the underdeveloped rail network in Albania, Bulgaria, and Macedonia, attempting to transport the vehicles by rail would be the least preferred course of action.

---

<sup>51</sup> *MTMCTEA Reference 94-700-2*, pp. 77 & 80.

<sup>52</sup> *Air Force Pamphlet 10-1403, Air Mobility Planning Factors* (Washington DC: Government Printing Office, March 1998), p 3-24. The MOG term literally refers to the maximum number of aircraft which can be accommodated on the airfield (usually in parking MOG), it is often specialized to refer to the working MOG (maximum number of aircraft which can be simultaneously "worked by maintenance, aerial port, and others), the fuel MOG (maximum number of aircraft which can be simultaneously refueled) or other constraining factors. It is most commonly expressed in C-141 equivalents. This pamphlet calculates the maximum aircraft on the ground (MOG) based on several quantifiable factors such as type of aircraft, operating hours of airfield, average payload of aircraft, and ground time. A MOG of eight 747 or C-141 equivalent aircraft is within the capabilities of Skopje airport. *Airfield Suitability and Restrictions Report (ASRR)*, (Scott Air Force Base, Illinois: Department of the Air Force, August 1998), The airfield at Skopje has been supporting the UN mission Operation Able Sentry since 1994.

<sup>53</sup> The characteristics, intent, and capabilities of the Attack Helicopter Flyaway Package was presented in a brief to the DCSOPS Force Projection Working Group, author was Major Vince Price, January 1997.

<sup>54</sup> *Automated Battlebook System (ABS)*, CD 3.0, (Headquarters, Department of the Army, 1995), Disc 1. The ABS is designed specifically for the United States Army War Reserve as a flexible, logistic mission planning tool. It provides real-time access to critical information about Army Prepositioned Stocks worldwide. Information regarding this software can be obtained by calling the Technical Support team at Stanley Associates, 1-800-762-9737. *Nelson*, 11-12.

<sup>55</sup> *Automated Battlebook System*, Disc 1, Executive Summary, p. 1.

<sup>56</sup> *Automated Battlebook System*, Disc 1, APS-2 APA Program, p 1-2, and Concept of the Heavy Lift Prepositioned Ships (HLPS), p. 1-2.

<sup>57</sup> FM 100-17-1, *Army Pre-Positioned Afloat Operations* p iv and 1-1. *Automated Battlebook System*, Disc 1, APS-2 APA Program, p 1-2.

<sup>58</sup> Attack Helicopter Flyaway Package brief, p 21.

<sup>59</sup> FM 17-95, *Cavalry Operations*, (Washington DC: Government Printing Office, December 1996) p 1-18 and 10-22.

<sup>60</sup> FM 17-95, *Cavalry Operations*, p.1-18.

<sup>61</sup> FM 17-95, *Cavalry Operations*, p 10-11 to 10-14.

<sup>62</sup> FM 17-95, *Cavalry Operations*, p. 10-37. Student Text 101-6, G1/G4 Battle Book, (Fort Leavenworth, Kansas, July 1997), p. 4-31.

---

<sup>63</sup> FM 17-95, *Cavalry Operations*, p10-38. *Student Text 101-6*, p. 4-32. FM 101-5-1, *Operational Terms and Graphics*, (Washington DC: Government Printing Office, 19 September 1997), p. 1-54 defines DS as a mission requiring a force to support another specific force and authorizing it to answer directly the supported force's request for assistance. GS is defined as that support which is given to the supported force as a whole and not to any particular subdivision thereof.

<sup>64</sup> *Student Text 101-6*, p 4-30.

<sup>65</sup> FM 17-95, *Cavalry Operations*, p. 10-23.

<sup>66</sup> *Student Text 101-6, G1/G4 Battle Book*, p.3-29.

<sup>67</sup> *Student Text 101-6, G1/G4 Battle Book*, p. 3-20. One ammunition company is capable of supporting a division's area of operation.

<sup>68</sup> *Student Text 101-6, G1/G4 Battle Book*, p 3-47 and 3-49

<sup>69</sup> *Student Text 101-6, G1/G4 Battle Book*, p. 3-32.

<sup>70</sup> Interview with LTC Jamerson (Deputy Commander of 7<sup>th</sup> Transportation Group, Fort Eustis). LTC Jamerson stated that Cargo Transportation companies are a recent addition to the Transportation Corps. These units are in the active force and are assigned to FORSCOM. One company is capable of managing and operating two seaports and two airfields. The organization required to support this particular operation is based in Fort Eustis. The unit's equipment remains uploaded aboard ship. When notified, this ship will deploy to the Port of Beaumont to be transloaded aboard the first FSS ship. Based upon the hostile environment, civilian stevedores will not be utilized. All support will be provided by the military.

<sup>71</sup> *Student Text 101-6, G1/G4 Battle Book*, p. 3-52. Air Terminal team coordinates the expeditious clearance of Army cargo and personnel from USAF air terminals. Coordinates retrograde or resupply cargo and personnel arrivals.

<sup>72</sup> *Student Text 101-6, G1/G4 Battle Book*, p. 3-27. The Petroleum Pipeline and Terminal Operating company operates one tank farm complex to store 100,000 to 500,000 barrels of bulk petroleum (7,875,00 gallons), depending on capacity and type of storage facilities available, and operates one tactical terminal facility for receiving, storing, bulk transferring, issuing, and distributing all bulk petroleum shipped into theater or independent corps.

<sup>73</sup> *Student Text 101-6, G1/G4 Battle Book*, p 3-42. Water Purification detachment can operate four water points. Unit can produce and issue up to 240,000 gallons of potable water per day using a fresh water source. Store up to 36,000 gallons of water.

<sup>74</sup> FM 54-30, *Corps Support Groups*, p 6-2. A Force Provider package is part

of the reception support mission. It could set up a force provider complex of sleeping, hygiene, eating, and morale/welfare facilities. The force provider complex can be set-up, operated, and maintained by a staff augmented by temporary duty personnel or local hire.

<sup>75</sup> FM 11-43, *The Signal Leader's Guide*, (Washington DC: Government Printing Office, June 1995), p 3-2. The MSE system is an area-switched communications system. The system provides communications for a notional five-division corps in an area of operation up to 15,000 square miles (37,500 sq. km). The system is digital, secure, highly flexible, and contains features that deal with link or functional element outages, traffic overload, and rapid movement of users. The system supports both mobile and wire subscribers in the five-division corps with means to exchange command, control, communications, and intelligence information in a dynamic tactical environment.

<sup>76</sup> *Student Text 101-6, G1/G4 Battle Book*, p 2-5 to 2-14. A Personnel Detachment will provide personnel support on an area basis, 24 hours a day. One personnel detachment is required per 6,000 soldiers. A Postal Service platoon provides postal services to organizations. The platoon can receive, break down, and distribute mail to supported organizations. A Replacement platoon is capable of controlling up to 100 replacements per day. The platoon will provide food service, encampment, limited supply, command and control, and by-name personnel accounting for replacement personnel. Finance detachment can support up to 6,000 soldiers. It will provide military pay support, commercial vendor services, and disbursing/funding support to an assigned area. A Press Camp Headquarters provides news briefings, press conferences, and escort control and support for the media personnel, and also acts as a clearinghouse for electronic print, still photography, and audiovisual products public affairs officers generate, and coordinates logistical support for media personnel who may require communications, billeting, messing, and transportation.

<sup>77</sup> FM 100-16, *Army Operational Support*, (Washington DC: Government Printing Office, May 1995), p 3-7 to 3-8.

<sup>78</sup> FM 54-30. *Corps Support Groups*, p. 1-4.

<sup>79</sup> FM 54-30. *Corps Support Groups*, p. 1-7. An ACR normally receives support from the corps support command (COSCOM). In instances when an ACR is placed temporarily under the command and control of a division or joint task force (JTF), the support relationship with the COSCOM should be maintained.<sup>79</sup> For certain missions, the Regiment may receive augmentation of combat and combat support units by corps, divisions within the corps, or forces within the JTF (i.e., stability operations). Augmentation may include a light infantry battalion, a lift aviation battalion, an engineer battalion or additional combat support units. This augmentation will require COSCOM to provide backup direct support teams to the Regiment to ensure the CSS support critical to the success of the operation.



---

<sup>80</sup> *FM 54-30. Corps Support Groups*, p 1-19 to 1-20. During the initial phases of RSOI, CSG elements that deployed as part of the lead elements of the ACR will begin erecting force provider complexes near the Port of Durres and Skopje to support the soldiers arriving into the theater. These life support complexes will consist of billeting tents, shelters, field kitchens, and laundry and sanitation facilities. As soldiers and equipment prepare to move to the tactical TAAs, the CSG will position assets near these forward areas to provide continuous support for the ACR. Once the TAAs are secured, the remaining elements of the CSG will move forward and continue to serve as the source of logistics for the 3d ACR and any other organization, either a sister service or an ally, operating within the ACR's area of operation.

<sup>81</sup> *FM 54-30. Corps Support Groups*, p 1-5, 1-6, 1-15 & 1-19. Operations in support of another service will normally be in support of the Marine Corps, although support to the Air Force or Navy could be required. Less support can be expected from an ally than from a sister Service, due to a greater dissimilarity between equipment and ammunition. Therefore, an accompanying task organized support element or corps slice will probably be larger, to include medical evacuation assets. The ally could provide rations and fuel, but even this support must be carefully considered and detailed.

<sup>82</sup> *FM 17-95, Cavalry Operations*, p. 10-23.

<sup>83</sup> *Automated Battlebook System*, Disc 1, APS-2 APA Program, p 1-2. The CSS augmentation identified as being necessary to support and sustain this operation are practically identical to the CSS configuration already established as part of APA-2. The ABS estimate has determined that the CSS package will flow aboard a single. The *USNS Gordon* has been identified as a CS/CSS loaded ship.

<sup>84</sup> Joint Pub 3-0, *Doctrine for Joint Operations*, (Washington DC: Government Printing Office, February 1995), p II-1 and VI-1. Joint Pub 3-0 is the keystone document of the joint operations series. It provides fundamental principles and doctrine for the conduct of joint and multinational operations.

## BIBLIOGRAPHY

### *Books*

- Beaver, Paul. "The Balkans: Global Security Assessment. *Jane's Sentinel: The Unfair Advantage*. 1994.
- Bellamy, Chris. *The Future of Land Warfare*. New York: St. Martin's Press, 1987.
- Clancy, Tom. *Armored Cav: A guided Tour of an Armored Cavalry Regiment*. New York: Berkley Books, 1994.
- Donnelly, Thomas, Margaret Roth, and Caleb Barker. *Operation Just Cause*. New York: Maxwell Macmillan International, 1991.
- Dupuy, Ernest R. and Trevor N. *The Harper Encyclopedia of Military History: From 3500 B.C. to the Present*, forth ed. New York: Harper Collins Publishers, 1993.
- Durch, William J. *UN Peacekeeping, American Politics, and the Uncivil Wars of the 1990s*. New York: St. Martin's Press, 1996.
- Kaplan, Robert D. *The Ends of the Earth*. New York: Random House, 1996.
- Lloyd's. *Ports of the World 1994*, United Kingdom: Lloyd's of London Press Ltd, 1994.
- Luttwak, Edward N. *The Grand Strategy of the Roman Empire: From the First Century A.D. to the Third*. Baltimore: The John Hopkins University Press, 1976.
- Macgregor, Douglas A. *Breaking the Phalanx: A New Design for Landpower in the 21st Century*. Westport: Praeger, 1997.
- Naveh, Shimon. *In Pursuit of Military Excellence: The Evolution of Operational Theory*. Portland, Oregon: Frank Cass Publishers, 1997.
- Record, Jeffrey. *Revising U.S. Military Strategy: Tailoring Means to Ends*. New York: Pergamon-Brassey's International Defense Publishers, 1984.
- Toffler, Alvin and Heidi. *War and Anti War*. New York: Little, Brown and Company, 1993.
- Turlington, John E. *Essays on Strategy IV, Learning Operational Art*. Washington, DC: National Defense University Press, 1987.

Weinberger, Casper, and Schweizer, Peter. With a forward by Margaret Thacher.  
*The Next War*. New York: Regnery Publishing, Inc, 1996.

### *Government Publications*

Center for Army Lessons Learned (CALL). *Lessons Learned Report - Former Yugoslavia Republic of Macedonia, Operation Able Sentry: Operations Other than War*. Fort Leavenworth: U.S. Army Training and Doctrine Command, October 1994.

Defense Mapping Agency Hydrology/Topographic Center. *Distances Between Ports, 5th ed.* Defense Mapping Agency Office of Distribution Services, September 1990.

Headquarters, Department of the Army. *Automated Battlebook System (ABS)*, Alexandria, Virginia: Stanley Associates, Inc, 1995.

Headquarters, Department of the Army. *The Signal Leader's Guide, FM 11-43*. Washington DC: Government Printing Office, June 1995

Headquarters, Department of the Army. *Cavalry Operations. FM 17-95*. Washington DC: Government Printing Office, December 1996.

Headquarters, Department of the Army. *Division Support Command: Armored, Infantry, and Mechanized Infantry Divisions. FM 63-2*. Washington DC: Government Printing Office, May 1991.

Headquarters, Department of the Army. *Division and Corps Logistics. FM 63-1*. Washington DC: Government Printing Office, May 1997.

Headquarters, Department of the Army. *Operations: Revised Final Draft, FM 100-5*. Washington DC: Government Printing Office, 19 June 1998.

Headquarters, Department of the Army. *Operational Terms and Graphics, FM 101-5-1*. Washington DC: Government Printing Office, 19 September 1997.

Headquarters, Department of the Army. *Army Operational Support, FM 100-16*. Washington DC: Government Printing Office, May 1995.

Headquarters, Department of the Army. *Army Pre-Positioned Afloat Operations. FM 100-17-1*. Washington DC: Government Printing Office, July 1996.

Headquarters, Department of the Army. *United States Army Posture Statement FY00: America's Army - Assuring Readiness for Today and for the 21<sup>st</sup> Century*. Washington DC: Government Printing Office, February 1999.

Headquarters, Department of the Army. *Unit Status Reporting. Army Regulation (AR) 220-1*, Washington DC: Government Printing Office, September 1997.

Headquarters, Air Mobility Command, Department of the Air Force, *Airfield Suitability and Restrictions Report (ASRR)*, Scott Air Force Base, Illinois, August 1998.

Military Traffic Management Command Transportation Engineering Agency. *Deployment Planning Guide: Transportation Assets Required for Deployment*, MTMCTEA Reference 97-700-5, Newport News, Virginia, July 1997.

Military Traffic Management Command Transportation Engineering Agency. *Logistics Handbook for Strategic Mobility Planning*, MTMCTEA Reference 94-700-2, Newport News, Virginia, April 1994.

The White House. *A National Security Strategy for a New Century*. Washington DC: Government Printing Office, October 1998.

U.S. Air Force. *Air Mobility Planning Factors*, Air Force Pamphlet 10-1403. Washington DC: Government Printing Office, March 1998.

U.S. Army Command and General Staff College. *G1/G4 Battle Book, Student Text 101-6*. Fort Leavenworth, Kansas, July 1997.

U.S. Department of Defense. *Doctrine for Joint Operations*, Joint Pub (JP) 3-0. Washington DC: Government Printing Office, February 1995.

U.S. Department of Defense. *Doctrine for Joint Interdiction Operations*, Joint Pub (JP) 3-03. Washington DC: Government Printing Office, April 1997.

U.S. Department of Defense. *Doctrine for Logistic Support of Joint Operations*, Joint Pub (JP) 4-0. Washington DC: Government Printing Office, January 1995.

U.S. Department of Defense. *Joint Tactics, Techniques and Procedures for Water Terminal Operations*, Joint Pub (JP) 4-01.5. Washington DC: Government Printing Office, June 1996.

### *Monographs and Theses*

Bird, Carl D. *Force XXI Logistics: Bonanza or Bust for the Maneuver Commander*. Fort Leavenworth, Kansas: School of Advanced Military Studies, United States Army Command and General Staff College -- Monograph, December 1997.

Harris, Michael J., *Tanks: Fulfilling a Role in Military Operations in Urban Terrain (MOUT)*. Fort Leavenworth, Kansas: School of Advanced Military Studies, United States Army Command and General Staff College -- Monograph, December 1998.

Nelson, Victor L. *Power Projection of an Army Corps by C+75-on Target or Wishful Thinking?* Fort Leavenworth, Kansas: School of Advanced Military Studies, United States Army Command and General Staff College -- Monograph, May 1998.

Schifferle, Peter J. *Incorporating Enemy Psychological Vulnerability into US Army Heavy Division IBP Doctrine*. Fort Leavenworth, Kansas: School of Advanced Military Studies, United States Army Command and General Staff College -- Monograph, December 1993.

Schneider, James J. *Vulcan's Anvil: The American Civil War and the Emergence of Operational Art*. Fort Leavenworth, Kansas: School of Advanced Military Studies, United States Army Command and General Staff College -- Theoretical Paper #4, June 1991.

Szayna, Thomas S., Graham E. Fuller, Robert D. Howe, Brian Nichiporuk, Kevin Jack Riley, Ashley J. Tellis, James A. Winnefeld. *Intervention in Intrastate Conflict: Implications for the Army in the Post Cold War Era*. Santa Monica, Ca: RAND, 1995.

#### *Periodicals and Articles*

Anderson, Jon R. "Peacekeepers Left High and Dry." *European Stars and Stripes*, March 2, 1999: p. 4.

Arey, Howard E. "The Division Covering Force." *Military Review*, July-August 1995: 45-49.

Bacevich, A. J., and Robert R. Ivany. "Deployable Armor Today." *Military Review*, April 1987:14-23.

Brinkerhoff, John R. "The Brigade-Based New Army." *Parameters*, Autumn 1997: 60-72.

Byrnes, Kevin P., David F. Melcher, Stephen M. Speakes, Kenneth F. Fisher Jr. "Projecting Combat Power." *Military Review*, March-April 1998.

Caldwell, Jim. "The New Army Division." *Soldiers*, August 1998: 22-25.

Cherry, Stanley F. "Task Force Eagle." *Military Review*, (July-August 1997): 62-72.

- Dunlap, Charles J. Jr. "21st Century Land Warfare: Four Dangerous Myths." *Parameters*, Autumn 1997: 27-37.
- Fastabend, David. "An Appraisal of The Brigade-Based New Army." *Parameters*, Autumn 1997: 73-81.
- Franks, Frederick M, Jr. "Battle Command: A Commander's Perspective." *Military Review*, May-June 1996: 4-25.
- Harris, David G., and Richard D. Stewart. "US Surge Sealift Capabilities: A Question of Sufficiency." *Parameters*, Spring 1998 67-83.
- Hartzog, William W., James G. Diehl. "Building the 21st-Century Heavy Division." *Military Review*, March-April 1998: 91-94.
- Hewishm, Mark and Rupert Pengelly. *Warfare in the Global City*: "The Demand of Military Operations in Urban Terrain." *Jane's International Defense Review*, June 1998.
- Holder, L. D., Edwin J. Arnold. "Moving a Heavy Division." *Military Review*, July 1998.
- Keithly, David M. "21st Century Logistics: Joint Ties that Bind." *Parameters*, Autumn 1997: 38-40.
- Metz, Steven. "Which Army After Next? The Strategic Implications of Alternative Futures." *Parameters*, Autumn 1997: 15-26.
- Naylor, Sean D. "Guard Regiment Heading for Bosnia." *Army Times*, 5 October 1998.
- Naylor, Sean D. "Strike Force Concept could Spread." *Army Times*, 11 May 1998.
- Naylor, Sean D. "Apache Task Force Deploys to Albania." *Army Times*, 19 April 1999.
- Oliver, George F. III. "2d ACR and Force Projection." *Military Review*, July-August 1995: 50-53.
- Macgregor, Douglas A. "Future Battle: The Merging Levels of War." *Parameters*, (Winter 1992-93): 33-47.
- Macgregor, Douglas A. "Setting the Terms of Future Battle for Force XXI." *The Land Warfare Papers*, June 1995.
- Roskin, Michael G. "The Bosnia-Serb Problem: What We Should and Should Not Do." *Parameters*, (winter 1992-93): 21-32.

"The Revolution in Military Thinking and Army Modernization." *Defense Report*, March 1996.

Warden, John A. "The Enemy as a System." *Airpower Journal*, (Spring 1995): 41-55.

Yates, Larry A. "Military Stability and Support Operations: Analogies, Patterns, and Recurring Themes." *Military Review*, (July-August 1997): 51-61.

### *Interviews*

Mr. Freese, U.S. Army Corps of Engineers, Operations Division, U.S. Army Topography Engineer Center, Alexandria, VA. Mr. Freese was a member of the team that produced the Southern Balkans Engineer Route Study. Interview by author, February 1999.

Mr. Milton, Fort Carson Installation Transportation Office, Fort Carson, Colorado. Interview by author, February 1999.

LTC Jamerson, Deputy Commander, 7<sup>th</sup> Transportation Group, Fort Eustis, Virginia. Interview by author, April 1999.

Major Steve Sanders. Major Sanders is currently an AMSP student and a Field Artillery officer. Major Sanders was formerly assigned to the 3<sup>rd</sup> ACR. Interview by author, April 1999.

Major Erin Gallogly-Staver. Major Gallogly-Staver is currently an AMSP student and a Military Intelligence officer. Major Gallogly-Staver has extensive background with psychological operations (PSYOP). Interview by author, April 1999.

Captain Mike Seen, 3<sup>rd</sup> Armored Cavalry Regimental Unit Movement Officer, Interview by author, February, 1999.

Captain Saul Herrera, S-4 Officer of the Aviation Squadron, 3<sup>rd</sup> ACR. Interview by author, February 1999.